



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/748,105

12/31/2003

Seung-Nyung Chung

1793.1160

6927

21171 7590 03/24/2009

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

VO, HUYEN X

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

03/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,105	Applicant(s) CHUNG ET AL.	
	Examiner HUYEN X. VO	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-29 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8,12-14,16,17 and 19 is/are rejected.
- 7) ☒ Claim(s) 2,5-7, 9-11, 15, 18, 20-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Crawford (USPN 574176).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-13 and 26-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
4. Claims 1-13 and 26-29 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101" – publicly available at USPTO.GOV, "memorandum to examining corps"). The instant claims neither transform underlying subject matter nor positively tie to another statutory

Art Unit: 2626

category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example, the steps of inputting speech, recognizing the input speech, determining the first alternative word, displaying a list, and determining time lapse are not “tied to” any particular apparatus or machine. These steps are considered mental steps that can easily be performed by a human being. Specifically, a person listens to speech uttered by another person, tries to determine what was spoken, writes down a list of recognized words on a piece of paper, and points to a particular word on the list for a period of time and selected the word as the word that was spoken.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 8, 12-14, 16-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 5864805) in view of Crawford (USPN 574176).

7. Regarding claims 1 and 17, Chen et al. disclose a speech recognition method and apparatus comprising:

inputting speech uttered by a user (*col. 2, lines 50-60*);

recognizing the input speech and displaying a list of a predetermined number of alternative words including a first alternative word to be recognized in an order of similarity (*referring to figures 3-5*); and

determining one of the alternative words as a final, recognized word according to the user selection (*the operation of figure 7, elements 703-709, element 704 indicates a user selection of an alternative word, and element 705 enables the user to continue with the selection of cancel the selection*).

Chen et al. fail to specifically disclose the step of selecting a word from a list of words that a cursor is currently at if a user selection has not been changed within predetermined standby time. However, Crawford teaches the step of selecting a word from a list of words that a cursor is currently at if a user selection has not been changed within predetermined standby time (*steps 502-506 in figure 5*).

Since Chen et al. and Crawford are analogous in the art because they are from the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chen et al. by incorporating the teaching of Crawford in order to improve speech recognition accuracy.

8. Regarding claim 14, Chen et al. disclose a computer-readable recording medium structure comprising processing instructions to control a processor to execute a speech recognition method, the method comprising:

recognizing speech uttered by a user and displaying a list of alternative words including a first alternative word, derived from the recognition of the speech in a predetermined order (*referring to figures 3-5*); and

determining one of the alternative words as a final, recognized word according to the user selection (*the operation of figure 7, elements 703-709, element 704 indicates a user selection of an alternative word, and element 705 enables the user to continue with the selection of cancel the selection*).

Chen et al. fail to specifically disclose determining whether a user selection from the list of alternative words has been changed within a predetermined standby time and determining the first alternative word on the list of alternative words that a cursor currently indicates, as the final, recognized word, if the user selection has not been changed. However, Crawford teaches determining whether a user selection from the list of alternative words has been changed within a predetermined standby time and determining the first alternative word on the list of alternative words that a cursor currently indicates, as the final, recognized word, if the user selection has not been changed (*steps 502-506 in figure 5*).

Since Chen et al. and Crawford are analogous in the art because they are from the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chen et al. by incorporating the teaching of Crawford in order to improve speech recognition accuracy.

Art Unit: 2626

9. Regarding claims 3, 8 and 16, Chen et al. further disclose the speech recognition method and computer-readable medium of claims 1 and 14, respectively, further comprising: determining another alternative word from the list of the predetermined number of alternative words that is selected by the user as the final, recognized word, if the user's selection is changed within the standby time (*the operation of figure 7, elements 701-705, element 704 indicates a user selection of an alternative word, and element 705 enables the user to continue with the selection or cancel the selection; this step suggest that there is a waiting period. If the selection is cancelled, then going back to waiting for a new selection*), adjusting the standby time according to user dexterity (*operation of figure 7*).

10. Regarding claim 12-13, Chen et al. further disclose the speech recognition method of claim 1, wherein the standby time is equally assigned to all of the alternative words on the list of alternative words, wherein the standby time is assigned differentially to each of the alternative words on the list of alternative words according to the predetermined order of listing the alternative words (*within the scope of the reference, operation of figure 7*).

11. Regarding claim 19, Chen et al. disclose the speech recognition apparatus of claim 17, wherein the post-processor comprises:

a window generator that generates a window for a graphic user interface comprising a list of alternative words that arranges the predetermined number of alternative words in a predetermined order (*figures 3-5*);

a standby time setter that sets a standby time from when the window is displayed to when one of the alternative words on the list of alternative words currently indicated by the cursor is determined as a final, recognized word (*the operation of figure 7, elements 703-709, element 704 indicates a user selection of an alternative word, and element 705 enables the user to continue with the selection of cancel the selection; this step suggest that there is a waiting period*); and

a final, recognized word determiner that determines the one of the alternative words on the list of alternative words currently indicated by the cursor as the final, recognized word if a user selection from the list of alternative words has not been changed within the standby time and determines another alternative word on the list of alternative words selected by the user as the final, recognized word if the user's selection from the list of alternative words has been changed (*the operation of figure 7, elements 703-709, element 704 indicates a user selection of an alternative word, and element 705 enables the user to continue with the selection of cancel the selection; this step suggest that there is a waiting period. If the selection is not canceled at step 705, the selection is used as indicated in step 708*).

Art Unit: 2626

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 5864805) in view of Huang et al. (US 5829000), and further in view of Crawford (USPN 574176).

13. Regarding claim 4, Chen et al. fail to specifically disclose the speech recognition method of claim 1, wherein the determination further comprises: updating erroneous word patterns using the one of the alternative words and the final, recognized word resulting from the recognition of the speech; and adjusting the order of the list of the predetermined number of alternative words using the erroneous word patterns.

However, Huang et al. teach updating erroneous word patterns using the one of the alternative words and the final, recognized word resulting from the recognition of the speech; and adjusting the order of the list of the predetermined number of alternative words using the erroneous word patterns (*element 903 in figure 9, training recognizer*).

Since Chen et al. and Huang et al. are analogous art because they are from the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Chen et al. by incorporating the teaching of Huang et al. in order to improve speech recognition accuracy for subsequent recognitions.

Allowable Subject Matter

14. Claims 2, 5-7, 9-11, 15, 18, and 20-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claims 26-29 are allowed over prior art of record. The following is an examiner's statement of reasons for allowance: the prior art of record fail to specifically disclose wherein the list of alternative words is continuously updated and arranged in a predetermined order by computing a number of times the first alternative word and the final recognized word match.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leontiades et al. (USPN 5909667) is considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN X. VO whose telephone number is (571)272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huyen X Vo/
Primary Examiner, Art Unit 2626

3/20/2009
